

Notice of Allowability	Application No.	Applicant(s)	
	09/905,378	GALICKI ET AL.	
	Examiner	Art Unit	
	AHMED ELALLAM	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 7/12/2005.
2. ☒ The allowed claim(s) is/are 1, 4, 7, 9, and 11-23 respectively renumbered 1-3, 5, 9, 10, 14, 4, 6-8, 11-13, and 15-17.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>8/25/2005</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:

The prior art of records fails to teach or suggest the followings:

A data routing unit comprising (inter alias): a data receiver, a data transmitter, and a bridge circuit connected to supply data to the data receiver and to receive data from the data transmitter, the bridge circuit responsive to a header of a data packet received from the data transmitter or received from the at least one set of data input lines to selectively route the received data packet to (1) the data receiver circuit, (2) a selected set of the at least one data output lines, or (3) both the data receiver circuit and a selected set of the at least one set of data output lines dependent upon the header, the bridge circuit further includes an input/output memory connected to the data receiver for storing data received by the data receiver and to the data transmitter for storing data to be transmitted by the data transmitter, and a central processing unit connected the input/output memory for storing data into the input/output memory and reading data from the input/output memory, the central processing unit operating in synchronism with a CPU clock which is asynchronous with the transmitter clock signal, a plurality of data lines and a data routing unit clock line, wherein the data transmitter generating data transmitted on the data lines synchronous with a transmitter clock signal on the data routing unit clock line, as indicated in independent claims 1 and 7.

A data routing unit comprising (inter alias): a data receiver, a data transmitter, and a bridge circuit connected to supply data to the data receiver and to receive data from the data transmitter, the bridge circuit responsive to a header of a data packet received from the data transmitter or received from the at least one set of data input lines to selectively route the received data packet to (1) the data receiver circuit, (2) a selected set of the at least one data output lines, or (3) both the data receiver circuit and a selected set of the at least one set of data output lines dependent upon the header, the bridge circuit further includes a node address register storing a uniquely assigned multi-bit node address, a node address comparator connected to the node address register for comparing predetermined destination node address bits of a header with the node address stored in the node address register, a plurality of routing registers, each routing register corresponding to one set of data output lines, each routing register storing an indication of a set of node addresses, a plurality of routing comparators, each routing comparator connected to a corresponding routing register for comparing predetermined destination node address bits of the header with the indication of a set of node addresses stored in the corresponding routing register, as indicated in independent claim 9.

A data routing unit comprising (inter alias): a data receiver, a data transmitter, and a bridge circuit connected to supply data to the data receiver and to receive data from the data transmitter, the bridge circuit responsive to a header of a data packet received from the data transmitter or received from the at least one set of data input

Art Unit: 2662

lines to selectively route the received data packet to (1) the data receiver circuit, (2) a selected set of the at least one data output lines, or (3) both the data receiver circuit and a selected set of the at least one set of data output lines dependent upon the header, the bridge circuit further includes a right routing register storing a right routing data word having a plurality of bits, each bit corresponding to a unique node address and having either a first digital state indicating routing via a right data output lines to reach a unique node address or a second digital state indicating not routing via the right data output lines to reach the unique node address, a left routing register storing a left routing data word having a plurality of bits, each bit corresponding to a unique node address and having either a first digital state indicating routing via a left data output lines to reach a unique node address or a second digital state indicating not routing via the left data output lines to reach the unique node address, a decoder receiving the header for converting the destination node address into a multi-bit destination data word having a bit corresponding to the destination node address in the first digital state and all other bits in the second digital state, a right comparator connected to the right routing register and the decoder for comparing the right routing data word and the destination data word, and a left comparator connected to the left routing register and the decoder for comparing the left routing data word and the destination data word, wherein the bridge circuit selectively routes the received data packet to the right or left data output lines based on the matching of the routing data words, as indicated in independent claim 11.

A data routing unit comprising (inter alias): a data receiver, a data transmitter, and a bridge circuit connected to supply data to the data receiver and to receive data from the data transmitter, the bridge circuit responsive to a header of a data packet received from the data transmitter or received from the at least one set of data input lines to selectively route the received data packet to (1) the data receiver circuit, (2) a selected set of the at least one data output lines, or (3) both the data receiver circuit and a selected set of the at least one set of data output lines dependent upon the header, wherein the bridge circuit selectively routes the received data packet to the data receiver when a predetermined central navigation bit of the header has a first digital state, routing the received data packet with the header deleted to a right set of data output line when a predetermined right navigation bit of the header has said first digital state and routing said received data packet with the header deleted to a left set of data output line when a predetermined left navigation bit of the header has the first digital state, as indicated in independent claim 13.

Conclusion

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (571) 272-3097. The examiner can normally be reached on 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kizou Hassan can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHMED ELALLAM
Examiner
Art Unit 2662
September 6, 2005



HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600